

## WARM-UP

1.  $5y + 22 = 6y$

$$\begin{array}{r} -5y \quad -5y \\ -22 = 1y \\ \hline \end{array}$$

3.  $\frac{2m}{3} - 5 = 7$

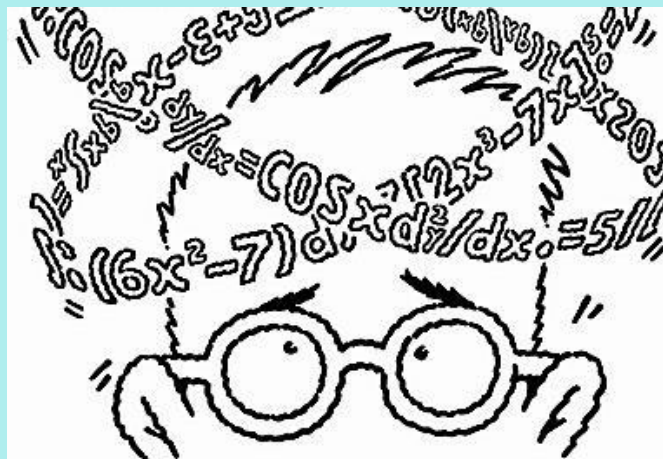
2.  $4k = 9k - 25$

4.  $14 = \frac{1g}{4} - 9$

-22  
Katie:  
cont

## Solving Equations with Variables on both sides of the equal sign!

WooHoo!



## Solving Equations w/ 4 terms

1. Determine which terms are like
2. Pick a term (ANY TERM!)
3. Determine a strategy for getting like terms together on opposite sides of the =
4. Solve the equation

$$\rightarrow 2x + 12 = -18 + 5x$$

$$\begin{array}{r|l}
 2x+12 & -18+5x \\
 +18 & +18 \\
 \hline
 2x+30 & 5x \\
 -2x & -2x \\
 \hline
 30 & 3x \\
 \hline
 10 & x
 \end{array}$$

Let's KICK IT UP a notch!

1.  $4a + 26 = 50 + 6a$

$$\begin{array}{r|l} -4a & -4a \\ \hline -2a + 26 = 50 & \\ -26 & -26 \\ \hline -2a & 24 \\ -2 & -2 \\ \hline a & -12 \end{array}$$

2.  $5x - 12 = 8x + 18$

Try these on your own!

3.  $9 + 3k = 2k - 12$

$$\begin{array}{rcl}
 +12 & & +12 \\
 \hline
 21 + 3k & = & 2k \\
 -3k & & -3k \\
 \hline
 21 & = & -k \\
 -21 & & +1 \\
 \hline
 -21 & = & -k + 1
 \end{array}$$

Check

4.  $18d - 21 = 15d + 3$

Check



# WARM-UP

1.  $5p - 14 = 8p + 4$

2.  $a + 5 = -5a + 5$

3.  $8c - 2 = -9 + 7c$

4.  $p - 1 = 8p - 8$

**Solve and SHOW ALL WORK!**

1.  $-18 - 6k = 6 + 18k$

2.  $5n + 34 = -2 + 14n$

#1

#2



